

**Notice of Allowability**

Application No.

10/777,459

Examiner

Jimmy Nguyen

Applicant(s)

GREATOREX ET AL.

Art Unit

2829

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/12/04.
2. ☒ The allowed claim(s) is/are 1 - 30.
3. ☒ The drawings filed on 12 February 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets" ) must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948 ) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 0604
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### Reasons for Allowance

1. The following is an examiner's statement of reasons for allowance:

The prior art that the examiner provides for the applicants do not teach the combination of a AC/DC monitoring system and a method of simultaneously monitoring an AC power supply and a DC power supply in a mobile unit, comprising:

a transformer for electrically isolating the AC power supply from the combined AC/DC monitoring system and for providing an isolated, AC voltage signal to the combined AC/DC monitoring system;

AC voltage monitor input terminals connected to the isolated AC signal monitoring the isolated AC voltage signal',

DC voltage monitor input terminals connected to the DC power supply for monitoring a DC voltage for the DC power supply;

a DC shunt, said DC shunt having a first terminal connected to a positive , non-grounded terminal of the DC power supply and said DC shunt having a second terminal;

a first DC current monitor input terminal and a second DC current monitor input terminal that are respectively connected to the first and to the second terminals of the DC shunt for measuring DC current from the DC power supply;

an analog-to-digital converter ADC system having respective input terminals connected to the AC voltage monitor input terminals, and the DC current monitor input

respective digital output signals indicative of isolated AC signal, the DC voltage, and the DC current; terminals, the DC voltage monitor input terminals, wherein the ADC provides instantaneous sampled values of the

a microcontroller having input terminals for receiving respective digital output signals of the ADC, wherein said microcontroller digitally computes various respective computed variables from the respective digital output signals received from the ADC;

a visual display system that receives signals representative of the computed variables from the microcontroller and that simultaneously visually displays a plurality of pre-selected ones of the respective computed variables;

an alarm system that is selectively activated when a pre-selected computed variable is in a respective alarm condition that is outside (exceeds) a predetermined limit ;  
wherein the microcontroller provides user menus displayed on the visual display system and wherein the microcontroller has keypress terminals for receiving respective user control signals from user-operated switches that are operated by a user in conjunction with the user menus to control operation of the microcontroller, the visual display system, and the alarm system.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

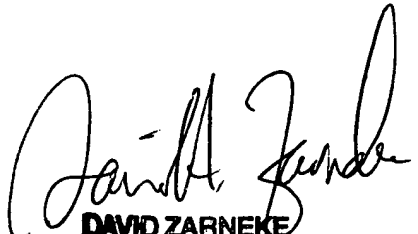
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2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Nguyen whose telephone number is (703) 306-5858.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

JN

Sep 29, 2004

  
**DAVID ZARNEKE**  
**PRIMARY EXAMINER**  
9/30/04